

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by:
Zari Hariri

GENERAL INFORMATION:

Name:	Holley Performance Products Inc
Address:	1801 Russellville Rd, P.O. Box 10360 Bowling Green, Kentucky, 42102-7360
Date application received:	4/9/2008 and 6/18/2008
SIC/Source description:	3497
Source ID #:	21-227-00008
Source A.I. #:	4116
Activity #:	APE20080001
Permit number:	V-03-053 (R3)

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
___ Administrative	<input checked="" type="checkbox"/> Title V
X Minor	<input checked="" type="checkbox"/> Synthetic minor
___ Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Minor Revision; V-03-053 (R3) – Emission increase

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	0.001	0.029
Nitric Acid	0.001	0.013
Haps		
Inorg. Chr	0.00005	0.001
2 nd application		
PM	0.015	0.365
HCl (HAP)	0.070	1.752

MINOR REVISION NUMBER 3:

This revision is a combined revision for two separate applications submitted on April 9, and June 18, 2008.

1. In the application submitted on April 9, 2008, the following changes were requested:

Change to the adjamatic Line:

- Replacing the existing adjamatic /chromate scrubber with a new scrubber that will be of the same or better efficiency as the existing scrubber.
- Activating a new line called “Aluminum Chromate Line” to adjamatic line (emission point 12) that has been authorized to operate by an off permit change dated July 10, 2007.

Change to Dye Line:

- Tank 3 and 5 in the dye line, which respectively held Hyproblack Part A&B and Hyprocoat Black S will now be empty.

Change to Brass Cleaning Line:

- Tank 8, which was formerly used for clean rinse, will contain the 1% HNO₃ solution that is currently in Tank 2.
 - Tank 7, which was formerly empty, will contain a 10% solution of Pre-Black.
 - Tank 2, which was formerly contained 1% HNO₃, will contain a 20% solution of Eclipse NCB.
 - Tank 1, which was formerly empty, will contain a 10% solution of Hypo 200
- These tanks all vent to emission point 15.

2. In the application received on June 18, 2008, the following changes were requested

Discussion of HCL usage limit- Emission point 06(13)- Tank 8:

Emission point 06(13) Tank 8 is part of the DMP auto line. Tank 8 holds 80% HCl acid. At the time Title V permit was prepared, the ton per year (TPY) emission limit was based on Holley's expected amount of usage, which was 0.06 tpy or approximately 1280 lb/yr. Since then some of the Holley's processes and chemical usages have been changed. In 2007 Holley used approximately 2.5 tpy of HCL in Tank 8, which was well below the 5 gal/hr usage for HCl usage in Tank 8.

In order to remain in compliance with their permit, Holley is requesting to increase in the usage rate limit for HCl in tank 8 to 18.0 tpy. Other Tanks in Holley's permit that are permitted for HCl (e.g. tank 12 in Brass Cleaning and Tank 9 in DMP Manual) are permitted for a maximum yearly usage rate of approximately 63 tpy. In 2007, plant wide Holley's HCl usage is well below their plant wide limits. Holley's HCl usage in tank 9 of DMP Manual was 2.8 tpy. Holley's usage in Tank 12 of Brass Cleaning was 0 tpy. This tank is currently empty. Holley also recently notified KDEP of a change to the Brass Cleaning line, and that Tank will continue to be empty. Therefore, Holley requests that 18 tons of the allowable usage for that tank be redistributed to Tank 8 of the DMP Auto line, thereby not increasing the site-wide total allowable HCl usage.

Discussion of Maxi-Black usage limit- Emission point 06(15)- Tank 11:

Emission point 06(15)-Tank 11 is part of the DMP Manual line. Tank 11 holds Maxi-Black FE. At the time the Title V permit was prepared, the tpy usage request was based on the Holley's expected amount of usage, which was 1.09 tpy or approximately 2180 lb/yr. Since then, some of Holley's processes and chemical usages have changed. In 2007, Holley used approximately 2850 pounds (or 1.4 tpy) of Maxi-Black FE in Tank 11. Holley self reports for emission point 06(15)-Tank 11, the annual Maxi-Black FE usage limit for 1.09 tons was exceeded for each 12 month period between August-December 2007. The usage is about 0.3 tons over the limit for each period for Tank 11. Holley is also authorized to use this chemical in emission point 06(15) – Tank 5, which also is permitted for a maximum yearly usage of 1.09 tpy, and their plant wide usage for Maxi-Black FE usage is below their plant wide limits.

In order to remain in compliance with their permit, Holley is requesting an increase in the usage rate limit for Maxi-Black FE in Tank 11 on DMP Manual to 3.0 tpy. In 2007, Holley's Maxi-Black usage in Tank 5 was 0 tpy. In 2007, plant wide Holley, Maxi-Black FE usage is well below their plant wide limits. In 2007, at their current usage rates, Holley was below all other permit limits.

MINOR REVISION NUMBER 2:

Holley Performance Products, Inc. needs to modify chemical usage for two plating lines and construct several new processes (Insignificant activities). The minor revision is only needed to this Title V permit since increased PM emission and VOCs emission caused by all the changes will be less than 1.6 TPY and 0.08 TPY, respectively. There is also no change made to Record Keeping and Monitoring requirements. The contents modified or added are as follows:

1. EP04 (EP05): One Branson ultrasonic Degreaser. Aqueous Ultrasonic Cleaner has been removed.
2. EP05 (EP06) Three Cold Cleaners: Remains three cold cleaners, however, the unit 18(f) replaced 18(c). Only H.P. Carburetor Cleaner is used.
3. EP 06(13): a mesh pad scrubber has been added to increase the efficiency of the scrubber in removing airborne contaminants and for moisture to drop out of the airstream (airflow: 17,560 CFM, and static pressure: 9”).
4. EP 06 (13): Dye Line Tank1. The usage of CLEPO-PK-3 has been increased from 0.04 TPY to 0.08 TPY.
5. EP 06 (15): Premium Line Tank 1. The usage of Zinc has been increased from 0.05 TPY to 0.5 TPY.
6. Insignificant Activities (IA):
 - a. IA17: Onshrud Surface Milling machines have been removed.
 - b. IA 19: 11 CNC Machine & Dwindraft Tables have been increased to 24.
 - c. New IA25: Five aqueous parts washers.

MINOR REVISION NUMBER 1:

Holley Performance Products, Inc. needs to modify some operation processes and construct several new processes. The minor revision is only needed to this Title V permit. The contents modified or added are as follows:

1. Original EP04 which is Sludge Dehydration System has been deleted since the system has been fully disconnected and not been used.
2. EP04 (EP05) One Branson Ultrasonic Degreaser & 1 Aqueous Ultrasonic Cleaner: Nu-Tri-Clean product replaced Solen 902 in the Aqueous Ultrasonic Cleaner.
3. EP05 (EP06) Six Cold Cleaners: Six cold cleaners has been changed to three since only three are on Site opposing to six the facility originally proposed.
4. EP06 (EP07) Plating Operations:
 - a. New chemicals are used, such as Solen 9001 and Solen 9002. Since Solen 9002 contains chromic acid (Chromium VI) and Chromium VI is a type of HAP with serious health concern. Even though Holley did stack grab-sample testing, it did not follow the conditions followed by Section G (d)(7) and the samples were not iso-kinetic. So, Holley is required to show compliance with 401 KAR 63:020, Potentially hazardous matter or toxic substances. The language “In order to show compliance with 401 KAR 63:020, Potentially hazardous matter or toxic substances, the permittee shall model for Chromium (VI) compounds and Chromic acid mist, due to the emission of chromium

from the source. The concentration of Chromium (VI) compounds and Chromic acid mist in the ambient air, open to the public, shall be below the carcinogenic risk of 1 in 1 million (as listed in the EPA Prioritized Dose-Response Values (PRDV)), which corresponds to the concentration of Chromium (VI) compounds and Chromic acid less than or equal to $0.1 \mu\text{g}/\text{m}^3$ and $0.008 \mu\text{g}/\text{m}^3$, respectively. Results shall be sent to the Division for Air Quality, no later than 3 months from issuance of this permit. If the permittee fails to show compliance as tested or modeled, then measures shall be taken to reduce the emissions which can include but not limited to adding additional control device(s) and/or pollution prevention measures (e.g. material substitution). The permittee is allowed one extra month to submit a remedial plan if one is required. The remedial plan shall also include timeline to accomplish the proposed actions.” has been added to Section D (7).

- b. Air dispersion modeling has been done for uncontrolled actual Hydrochloric acid emission from Plating Operations using ISCST3, and it was found that the emission was below the threshold for non-cancer risk caused by inhaling Hydrochloric acid ($0.02 \text{ mg}/\text{m}^3$) specified in PDRV.
- c. Contents in some of tanks have been changed and new tanks are added.

Brass Cleaning		
Tank	Previous Contents	Current Contents
2	Rinse	1% HNO ₃
3	67% HNO ₃	Rinse
4	Violet dye	Empty
11	Chromate 154	Yellow T Chromate
Udylite Cleaning		
1	S-224 Soap	49 NC Soap
2	S-161	1054 A Soap
13	Dichromate L154	Yellow T Chromate
Deoxidize		
2	Soap Rinse	Soap Rinse, Resco 4988
3	Dart 151	Empty
DMP Automatic		
1	Warm Rinse	Lab Oil 72D
2	Empty	Caustic Cleaner
3	Empty	50% Caustic
7	Empty	Yellow T Chromate
8	Empty	20% HCl
11	Empty	Yellow T Chromate
14	Zinc Plating	Caustic Cleaner
15	NA	Cold Rinse
16	NA	Cold Rinse
17	NA	Chromate Recovery
Tank	Previous Contents	Current Contents
DMP Manual		
5	Nickel Pentrate	Maxi Black FE
11	Nickel Pentrate	Maxi Black FE
Premium Line		
4	Dichromate 154 L	Yellow T Chromate

Dye Line		
1	170 Kenvert	CLEPO PK 3

5. Insignificant Activities (IA):
 - a. Modified IAs: Space Heater, SWECO Shaker replacing AR Industries S-4, were modified.
 - b. New IAs: Sand Blasting Process, 11-CNC Machines & Downdraft Tables, 4-Foam packing Processes, Impregnation Line, 4-Above Ground Storage Tanks, and 16-Mineral Spirits Testing, were added.
 - c. Existing IAs, however not included in the original Title V permit: Onshrud Surface Milling machines, 2-Dynos process, and 5-soldering Stations, were added.
6. Section D: Emission limitation and compliance demonstration method for Chromium (VI) have been added (number 9).

SOURCE DESCRIPTION:

Holley Performance Products is a final machining and assembly facility for automotive engine components, with a major focus on carburetors and fuel pumps. Partially finished parts and raw materials are received at the Bowling Green KY facility where they undergo final machining, cleaning, chemical dying or plating, polishing, assembly, quality control testing, packaging for shipment and storage. These processes include:

- Final Machining – parts are heat treated and/or milled to meet assembly criteria;
- Chemical Dying or Plating – parts are run through numerous chemical cleaners and surface preparation solutions before a final chrome or dye coating is applied;
- Polishing – metal parts that have undergone machining, cleaning, and/or chemical dying/plating are polished to remove rough edges and to provide the necessary surface finish
- Assembly – manufactured components are assembled into final automotive components such as carburetors or fuel pumps;
- Quality Control Testing – assembled parts are bench tested to verify fuel flow characteristics and to verify that the parts are operating within specifications;
- Packaging – completed parts are packaged for shipment and consumer sales.

Holley also repairs and rebuilds carburetors. These units are received, disassembled, cleaned, repaired, reassembled, and quality control tested before being shipped to customers. There are a total of 11 stacks located at the plant.

Compliance Assurance Monitoring (CAM) does not apply because Holley Performance Products Inc. does not meet one of the criteria, which ‘is subject to emission limitation and has a control device to meet that limit’. Holley Performance Product Inc. is major source for VOC and

requested VOC emission limitation, but there is no control equipment to reduce VOC emissions in the plant.

EMISSION AND OPERATING CAPS DESCRIPTION:

- i) The source requested limitation on the VOC emissions to preclude PSD major source applicability.
- ii) Plant-wide 12-month rolling average of Volatile Organic Compound (VOC) emissions shall not exceed 240 tons/yr, to preclude PSD major source applicability.
- iii) Plant-wide 12-month rolling average of Sulfuric Acid emissions shall not exceed 2.23 lbs/hr and 4.46 tons/year. This limitation was included in the revised O-89-076 permit.
- iv) Plant-wide 12-month rolling average of Sodium Hydroxide emissions shall not exceed 5.16 lbs/hr and 5.16 tons/year. This limitation was included in the revised O-89-076 permit.
- v) Plant-wide 12-month rolling average of Zinc Oxide emissions shall not exceed 12.5 lbs/hr and 12.5 tons/year. This limitation was included in the revised O-89-076 permit.
- vi) Plant-wide 12-month rolling average of Chromium III emission shall not exceed 0.251 lbs/hr and 0.777 tons/year. This limitation was included in the revised O-89-076 permit.
- vii) The appropriate compliance demonstration methods for emission limitations and operating limitations have been incorporated in the permit.

OPERATIONAL FLEXIBILITY:

The Source is restricted as to 7200 hrs of operation and quantity of product produced while remaining within the caps above.